

# Sediment Quality at Ten Long-term Monitoring Stations in Puget Sound, 1989-2000

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## Extended Abstract

As part of the Puget Sound Ambient Monitoring Program, the Washington Department of Ecology sampled sediments at 10 sites in Puget Sound for trends in infauna (1989-2000) and changes in contaminants (1989-1996, 2000). The stations were located mainly away from known point sources of contaminants. Overall metals concentrations decreased at 5 of the 10 sites, with copper concentrations decreasing at 8 of the 10 sites. PAHs increased at several locations, especially at the east side of Anderson Island. Sinclair Inlet had the highest metals concentrations of all sites, with mercury levels consistently exceeding Washington State Sediment Quality Standards. PAH levels in Thea Foss Waterway were 20-30 times higher than at other locations. Metals and PAHs decreased at Point Pully. Few other contaminants were detected at the stations, indicating generally uncontaminated sediments. There were significant changes in infaunal communities at several sites that appear to be related to changes in sediment grain size (*e.g.*, silt from the Fraser River plume affecting benthos in the Strait of Georgia north of Patos Island) and contaminant levels (*e.g.*, increase in PAHs east of Anderson Island). Detailed results are published in Partridge *et al.*, in review.

## References

Partridge, V., K. Welch, S. Aasen, and M. Dutch, in review, Analysis of Sediment Quality at Ten Long-Term Stations in Puget Sound for the Puget Sound Ambient Monitoring Program (PSAMP) Sediment Monitoring Component, 1989-2000, Washington State Department of Ecology, Olympia, WA.